

Form PTO-1449 (modified)

Atty. Docket No.

UTSD:596/SLH

Serial No.

09/460,292

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Applicant

David J. Mangelsdorf, Joyce J. Repa, Stephen D. Turley
and John M. Dietschy

Filing Date:

December 10, 1999

Group:

~~1615~~ 1632

Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 2

Documents

Exa m. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
gw	A1	4,430,434	Feb. 7, 1984	Sanders <i>et al.</i>	435	253	May 7, 1980
	A2	4,559,302	Dec. 17, 1985	Thomas D. Ingolia	435	172.3	Nov. 1, 1982
	A3	4,727,028	Feb. 23, 1988	Santerre <i>et al.</i>	435	240.2	Sep. 30, 1983
	A4	4,960,704	Oct. 2, 1990	Ingolia <i>et al.</i>	435	252.33	May 31, 1988
	A5	5,354,855	Oct. 11, 1994	Cech <i>et al.</i>	536	24.1	Feb. 28, 1992
	A6	5,697,899	Dec. 16, 1997	Hillman <i>et al.</i>	604	28	Feb. 7, 1995
	A7	5,779,708	Jul. 14, 1998	Gin Wu	606	80	Aug. 15, 1996
	A8	5,780,676	Jul. 14, 1998	Boehm <i>et al.</i>	562	490	Jun. 7, 1995
	A9	5,783,208	Jul. 21, 1998	Venkateshwaran <i>et al.</i>	424	448	Jul. 19, 1996
	A10	5,789,655	Aug. 4, 1998	Prusiner <i>et al.</i>	800	2	Jun. 6, 1996
	A11	5,797,898	Aug. 25, 1998	Santini, Jr. <i>et al.</i>	604	890.1	Jul. 2, 1996

FOREIGN PATENT DOCUMENTS

EXAM INIT.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
gw	B1	EPO 0273085	Dec. 29, 86	EUROPE			

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
gw	C1	Accad and Farese Jr., "Cholesterol homeostasis: a role for oxysterols". <i>Curr. Biol.</i> 8:R601-R604, 1998.

EXAMINER:

Joe Wontach

DATE CONSIDERED:

12/19/00

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)



Form PTO-1449 (modified)

Atty. Docket No.

Serial No.

UTSD:596/SLH

09/460,292

List of Patents and Publications for Applicant's

Applicant

David J. Mangelsdorf, Joyce J. Repa, Stephen D. Turley
and John M. Dietschy

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:

December 10, 1999

Group:

~~1615~~ 1632

Documents

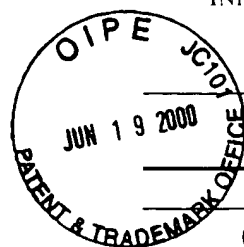
See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 2



Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
9w	C2	Androlewicz <i>et al.</i> , "Characteristics of peptide and major histocompatibility complex class I/β ₂ -microglobulin binding to the transporters associated with antigen processing (TAP1 and TAP2)," <i>Proc. Natl. Acad. Sci. USA</i> 91:12716 - 12720, 1994.
	C3	Bodzioch <i>et al.</i> "The gene encoding ATP-binding cassette transporter 1 is mutated in Tangier disease," <i>Nat. Genet.</i> 22:347-351, 1999.
	C4	Boehm <i>et al.</i> , "Design and synthesis of potent retinoid X receptor selective ligands that induce apoptosis in leukemia cells." <i>J. Med. Chem.</i> 38:3146-3155, 1995.
	C5	Brooks-Wilson <i>et al.</i> "Mutations in <i>ABCI</i> in Tangier disease and familial high-density lipoprotein deficiency," <i>Nat. Genet.</i> 22:336-345, 1999.
	C6	Brown and Goldstein, "The SREBP pathway: regulation of cholesterol metabolism by proteolysis of a membrane-bound transcription factor," <i>Cell</i> , 89:331-340, 1997.
	C7	Buchler <i>et al.</i> , "cDNA cloning of the hepatocyte canalicular isoform of the multidrug resistance protein, cMrp, reveals a novel conjugate export pump deficient in hyperbilirubinemic mutant rats," <i>J. Biol. Chem.</i> 271(25):15091-15098, 1996.
	C8	Bugge <i>et al.</i> , "RXRα, a promiscuous partner of retinoic and thyroid hormone receptors," <i>EMBO J.</i> , 11(4):1409-1418, 1992.
	C9	Chiang and Stroup, "Identification and characterization of a putative bile acid-responsive element in cholesterol 7α-hydroxylase gene promoter," <i>J. Biol. Chem.</i> , 269(26):17502-17507, 1994.
	C10	Field <i>et al.</i> , "Caveolin is present in intestinal cells: role in cholesterol trafficking?" <i>J. Lipid Res.</i> 39:1938-1950, 1998.
	C11	Forman <i>et al.</i> , "Unique response pathways are established by allosteric interactions among nuclear hormone receptors," <i>Cell</i> , 81:541-550, 1995.
	C12	Forman <i>et al.</i> , <i>Cell</i> , "Identification of a nuclear receptor that is activated by farnesol metabolites," 81:687-693, 1995.
	C13	Forman <i>et al.</i> , "15-Deoxy-Δ ^{12,14} -prostaglandin J ₂ is a ligand for the adipocyte determination factor PPARγ," <i>Cell</i> , 83(5):803-812, 1995b.

EXAMINER:

DATE CONSIDERED:

12/19/00

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

Form PTO-1449 (modified)

JUN 19 2000

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

UTSD:596/SLH

Serial No.

09/460,292

Applicant

David J. Mangelsdorf, Joyce J. Repa, Stephen D. Turley
and John M. Dietschy

Filing Date:

December 10, 1999

Group:

1615-1632

Documents

See Page 1

Foreign Patent Documents

See Page 1

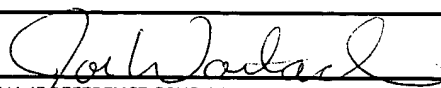
Other Art

See Page 2

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
90	C14	Forman <i>et al.</i> , "A domain containing leucine-zipper-like motifs mediate novel <i>in Vivo</i> interactions between the thyroid hormone and retinoic acid receptors," <i>Mol. Endocrinol.</i> , 3:(10)1610-1626, 1989.
	C15	Francis <i>et al.</i> , "Defective removal of cellular cholesterol and phospholipids by apolipoprotein A-1 in Tangier disease," <i>J. Clin. Invest.</i> 96:78-87, 1995.
	C16	Glass, "Differential recognition of target genes by nuclear receptor monomers, dimers, and heterodimers," <i>Endocrine Rev.</i> , 15(3):391-407, 1994.
	C17	Hersdorffer <i>et al.</i> , "Efficient gene transfer in live mice using a unique retroviral packaging line," <i>DNA Cell Biol.</i> , 9(10):713-723, 1990.
	C18	Higgins, "ABC transporters: from microorganisms to man," <i>Annu. Rev. Cell Biol.</i> 8:67-113, 1992.
	C19	Homan and Krause, "Established and emerging strategies for the inhibition of cholesterol absorption." <i>Curr. Pharmaceut. Design</i> 3:29-44, 1997.
	C20	Ishibashi <i>et al.</i> , "Hypercholesterolemia in low density lipoprotein receptor knockout mice and its reversal by adenovirus-mediated gene delivery," <i>J. Clin. Invest.</i> , 92:883-893, 1993.
	C21	Ishibashi <i>et al.</i> , "Disruption of cholesterol 7 α -hydroxylase gene in mice. I. Postnatal lethality reversed by bile acid and vitamin supplementation," <i>J. Biol. Chem.</i> , 271(30):18017-18023, 1996.
	C22	Janowski <i>et al.</i> , "An oxysterol signaling pathway mediated by the nuclear receptor LXR α ," <i>Nature</i> , 383:728-731, 1996.
	C23	Kliwer <i>et al.</i> , "Convergence of 9- <i>cis</i> retinoic acid and peroxisome proliferator signalling pathways through heterodimer formation of their receptors," <i>Nature</i> , 358:771-774, 1992.
	C24	Kliwer <i>et al.</i> , "Retinoid X receptor interacts with nuclear receptors in retinoic acid, thyroid hormone and vitamin D ₃ signalling," <i>Nature</i> , 355: 446-449, 1992.
	C25	Kliwer <i>et al.</i> , "Differential expression and activation of a family of murine peroxisome proliferator-activated receptors," <i>Proc. Natl. Acad. Sci. USA</i> , 91:7355-7359, 1994..
	C26	Kurokawa <i>et al.</i> , "Differential orientations of the DNA-binding domain and carboxy-terminal dimerization interface regulate binding site selection by nuclear receptor heterodimers," <i>Genes Dev.</i> , 7:1423-1435, 1993.

EXAMINER:



DATE CONSIDERED:

12/19/00

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

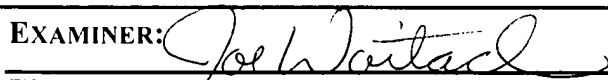
INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

Form PTO-1449 (modified)		Atty. Docket No. UTSD:596/SLH	Serial No. 09/460,292
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant David J. Mangelsdorf, Joyce J. Repa, Stephen D. Turley and John M. Dietschy	
		Filing Date: December 10, 1999	Group: 1615 1632
Documents See Page 1	Foreign Patent Documents See Page 1	Other Art See Page 2	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
9w	C27	Kurokawa <i>et al.</i> , "Regulation of retinoid signalling by receptor polarity and allosteric control of ligand binding," <i>Nature</i> , 371:528-531, 1994.
	C28	Kurokawa <i>et al.</i> , "Polarity-specific activities of retinoic acid receptors determined by a co-repressor," <i>Nature</i> , 377:451-454, 1995.
	C29	Langmann <i>et al.</i> "Molecular cloning of the human ATP-binding cassette transporter 1 (hABC1): evidence for sterol-dependent regulation in macrophages," <i>Biochem. Biophys. Res. Commun.</i> 257:29-33, 1999.
	C30	Lawn <i>et al.</i> "The Tangier disease gene product ABC1 controls the cellular apolipoprotein-mediated lipid removal pathway," <i>J. Clin. Invest.</i> 104:R25-R31, 1999.
	C31	Leblanc & Stunnenberg, "9-Cis retinoic acid signaling: changing partners causes some excitement," <i>Genes Dev.</i> , 9:1811-1816, 1995.
	C32	Lehmann <i>et al.</i> , "Activation of the nuclear receptor LXR by oxysterols defines a new hormone response pathway," <i>J. Biol. Chem.</i> , 272(6):3137-3140, 1997.
	C33	Lehrman <i>et al.</i> , "Alu-Alu recombination deletes splice acceptor sites and produces secreted low density lipoprotein receptor in a subject with familial hypercholesterolemia," <i>J. Biol. Chem.</i> , 262(7):3354-3361, 1987.
	C34	Leid <i>et al.</i> , "Purification, cloning, and RXR identify of the HeLa cell factor with which RAR or TR heterodimerizes to bind target sequences efficiently," <i>Cell</i> , 68:377-395, 1992.
	C35	Leid <i>et al.</i> , "Multiplicity generates diversity in the retinoic acid signalling pathways," <i>Trends Biochem Sci.</i> , 17:427-433, 1992.
	C36	Mangelsdorf <i>et al.</i> , "A direct repeat in the cellular retinol-binding protein type 11 gene confers differential regulation by RXR and RAR," <i>Cell</i> , 66:555-561, 1991.
	C37	Mangelsdorf <i>et al.</i> , "Characterization of three RXR genes that mediate the action of 9-cis retinoic acid," <i>Genes Dev.</i> , 6:329-344, 1992.
	C38	Mangelsdorf <i>et al.</i> , "Nuclear receptor that identifies a novel retinoic acid response pathway," <i>Nature</i> , 345:224-229, 1990.
	C39	Marks <i>et al.</i> , "H-2R11BP (RXR β) heterodimerization provides a mechanism for combinatorial diversity in the regulation of retinoic acid and thyroid hormone responsive genes," <i>EMBO J.</i> , 11(4):1419-1435, 1992.

EXAMINER:



DATE CONSIDERED:

12/19/00

EXAMINER: INITIAL, IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

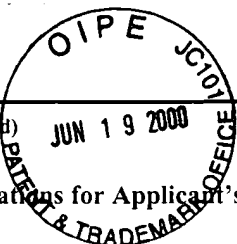
INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)



Atty. Docket No.

UTSD:596/SLH

Serial No.

09/460,292

Applicant

David J. Mangelsdorf, Joyce J. Repa, Stephen D. Turley and John M. Dietschy

Filing Date:

December 10, 1999

Group:

1615-1632

Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 2

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
9W	C40	McNeish <i>et al.</i> , "High density lipoprotein deficiency and foam cell accumulation in mice with targeted disruption of ATP-binding cassette transporter-1," <i>PNAS</i> , 97(8): 4245-4250, 2000.
	C41	Mori <i>et al.</i> , "Molecular cloning and deduced amino acid sequence of nonspecific lipid transfer protein (sterol carrier protein 2) of rat liver: a higher molecular mass (60 kDa) protein contains the primary sequence of nonspecific lipid transfer protein as its C-terminal part," <i>Proc. Natl. Acad. Sci. USA</i> , 88:4338-4342, 1991.
	C42	Orso <i>et al.</i> , "Transport of lipids from Golgi to plasma membrane is defective in Tangier disease patients and <i>Abcl</i> -deficient mice," <i>Nature Genetics</i> , 24:192-196, 2000.
	C43	Osono <i>et al.</i> , "Role of the low density lipoprotein receptor in the flux of cholesterol through the plasma and across the tissue of the mouse," <i>J. Clin. Invest.</i> , 95:1124-1132, 1995.
	C44	Peet <i>et al.</i> , "The LXRs: a new class of oxysterol receptors," <i>Curr. Opin. Genet. Dev.</i> 8:571-575, 1998.
	C45	Peet <i>et al.</i> , "Cholesterol and bile acid metabolism are impaired in mice lacking the nuclear oxysterol receptor LXR α ," <i>Cell</i> 93:693-704, 1998.
	C46	Perlmann & Jansson, "A novel pathway for vitamin A signaling mediated by RXR heterodimerization with NGFI-B and NURR1," <i>Genes Dev.</i> , 9:769-782, 1995.
	C47	Perlmann <i>et al.</i> , "Determinants for selective RAR and TR recognition of direct repeat HREs," <i>Genes Dev.</i> , 7:1411-1422, 1993.
	C48	Repa and Mangelsdorf, "Nuclear receptor regulation of cholesterol and bile acid metabolism," <i>Curr. Opin. in Biotech.</i> , 10: 557-563, 1999.
	C49	Rudling, "Hepatic mRNA levels for the LDL receptor and HMG-CoA reductase show coordinate regulation <i>in vivo</i> ," <i>J. Lipid Res.</i> , 33:493-501, 1992.
	C50	Russell and Setchell, "Bile acid biosynthesis," <i>Biochemistry</i> , 31(20): 4737-4749, 1992.
	C51	Rust <i>et al.</i> , "Tangier disease is caused by mutations in the gene encoding ATP-binding cassette transporter 1," <i>Natural Genetics</i> , 22: 352-355, 1999.
	C52	Savary <i>et al.</i> , "Isolation and chromosomal mapping of a novel ATP-binding cassette transporter conserved in mouse and human," <i>Genomics</i> 41:275-275, 1997.

EXAMINER:

DATE CONSIDERED:

12/19/00

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

Form PTO-1449 (modified)

JUN 19 2000

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

UTSD:596/SLH

Serial No.

09/460,292

Applicant

David J. Mangelsdorf, Joyce J. Repa, Stephen D. Turley and John M. Dietschy

Filing Date:

December 10, 1999

Group:

~~1615~~ 1632

Documents

See Page 1

Foreign Patent Documents

See Page 1

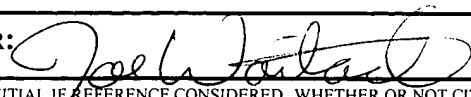
Other Art

See Page 2

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
9w	C53	Schwarz <i>et al.</i> , "Marked reduction in bile acid synthesis in cholesterol 7 α -hydroxylase-deficient mice does not lead to diminished tissue cholesterol turnover or to hypercholesterolemia," <i>J. Lipid Res.</i> 39:1833-1843, 1998.
	C54	Shimano <i>et al.</i> , "Overproduction of cholesterol and fatty acids causes massive liver enlargement in transgenic mice expressing truncated SREBP-1a," <i>J. Clin. Invest.</i> , 98(7):1575-1584, 1996.
	C55	Shimano <i>et al.</i> , "Elevated levels of SREBP-2 and cholesterol synthesis in livers of mice homozygous for a targeted disruption of the SREBP-1 gene," <i>J. Clin. Invest.</i> , 100(8):2115-2124, 1997.
	C56	Tall, "An overview of reverse cholesterol transport," <i>Eur. Heart J.</i> 19(Suppl. A): A31-A35, 1998.
	C57	Turley and Dietschy, "The metabolism and excretion of cholesterol by the liver," In: <i>The Liver Biology and Pathobiology</i> , Arias, Jakoby, Popper, Schachter, Shafritz (eds.), New York: Raven Press, Ltd., pp. 617-641, 1988.
	C58	Turley <i>et al.</i> , "Psyllium augments the cholesterol-lowering action of cholestyramine in hamsters by enhancing sterol loss from the liver," <i>Gastroenterology</i> , 107:444-452, 1994.
	C59	Turley <i>et al.</i> , "Cholesterol-lowering action of psyllium mucilloid in the hamster: sites and possible mechanisms of action," <i>Metabolism</i> , 40(10):1063-1073, 1991.
	C60	Turley <i>et al.</i> , "Effect of feeding psyllium and cholestyramine in combination on low density lipoprotein metabolism and fecal bile acid excretion in hamsters with dietary-induced hypercholesterolemia," <i>J. Cardiovasc. Pharmacol.</i> 27:71-79, 1996.
	C61	Turley <i>et al.</i> , "Regulation of fecal bile acid excretion in male Golden Syrian hamsters fed a cereal-based diet with and without added cholesterol," <i>Hepatology</i> , 25:797-803, 1997.
	C62	Wahlstrom <i>et al.</i> , "Binding characteristics of the thyroid hormone receptor homo- and heterodimers to consensus AGGTCA repeat motifs," <i>Mol. Endocrinol.</i> , 6:1013-1022, 1992.
	C63	Willy and Mangelsdorf, "Nuclear orphan receptors: The search for novel ligands and signalling pathways," <i>Hormones and Signaling</i> , 1: 307 - 358, 1998.
	C64	Willy <i>et al.</i> "LXR, a nuclear receptor that defines a distinct retinoid response pathway," <i>Genes Dev.</i> , 9:1033-1045, 1995.

EXAMINER:



DATE CONSIDERED:

12/19/00

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

Form PTO-1449 (modified)

JUN 19 2000

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

UTSD:596/SLH

Serial No.

09/460,292

Applicant

David J. Mangelsdorf, Joyce J. Repa, Stephen D. Turley
and John M. Dietschy

Filing Date:

December 10, 1999

Group:

1615 1632

Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 2

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
9w	C65	Yeom <i>et al.</i> , "Germline regulatory element of Oct-4 specific for the totipotent cycle of embryonal cells," <i>Development</i> , 122:881-894, 1996.
	C66	Yokode <i>et al.</i> , "Diet-induced hypercholesterolemia in mice: prevention by overexpression of LDL receptors," <i>Science</i> , 250:1273-1275, 1990.
	C67	Young and Fielding, "The ABCs of cholesterol efflux," <i>Nature Genetics</i> 22: 316-318, 1999.
	C68	Yu <i>et al.</i> , "RXR β : A coregulator that enhances binding of retinoic acid, thyroid hormone, and vitamin D receptors to their cognate response elements," <i>Cell</i> , 67:1251-1266, 1991.
	C69	Zechel <i>et al.</i> , "The dimerization interfaces formed between the DNA binding domains of RXR, RAR and TR determine the binding specificity and polarity of the full-length receptors to direct repeats," <i>EMBO J.</i> , 13(6):1425-1433, 1994.
	C70	Zhang <i>et al.</i> , "Retinoid X receptor is an auxiliary protein for thyroid hormone and retinoic acid receptors," <i>Nature</i> , 355:441-446, 1992.

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)